

REMARKS/ARGUMENTS

Claims 1-28 remain in this application. Claims 7, 9-11, 17, and 20 are amended. No new matter is added by the amendments to the claims.

The drawings are amended to correct an inadvertent mislabeling. A replacement sheet is included herewith that changes labeled element "308" to read "312" in FIG. 1. No new matter is added by the amendment to the drawing.

CLAIM REJECTION UNDER 35 U.S.C. 112

At page 2 of this Office action, claims 7-22 are rejected under 35 U.S.C. 112, second paragraph as "being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Responsive to the points of rejection detailed at page of the Office Action, claims 7 and 11 are amended to correct inadvertent grammatical errors and claims 9, 10, 17, and 20 are amended to provide antecedent basis for "the second rack", "the vertical profile view frame", and "the autopilot".

Because of the aforementioned amendments to claims 7, 9-11, 17, and 20, Applicant submits that claims 7, 9-11, 17, and 20 are definite. Because of the foregoing discussion regarding claims 7, 9-11, 17, and 20 and because claims 8, 12-16, 18, 19, 21, and 22 depend from claim 7 or an intermediate claim depending therefrom, Applicant submits that claims 8, 12-16, 18, 19, 21, and 22 are also definite. In view of the foregoing, Applicant submits that rejection of claims 7-22 under 35 U.S.C. 112 is overcome.

CLAIM REJECTION UNDER 35 U.S.C. 102

At page 2 of this Office Action, claims 1-3, 6-10, 14-16, 21-24, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Briffe et al. (U.S. Patent No. 6,112,141), hereinafter Briffe. Applicant submits that claims 1-3, 6-10, 14-16, 21-24, 27, and 28 are not anticipated by Briffe because Briffe does not disclose all of the elements of the claimed invention.

Independent claim 1 recites a method of displaying a vertical situation of a vehicle having, inter alia, the steps of:

“beginning a first vertical profile view of a first track of the vehicle at about a point in the profile view frame indicative of a current position of the vehicle;
ending said first vertical profile view of the current track at about a point in the profile view frame indicative of a predetermined location; and
extending a second vertical profile view of a second track of the vehicle from about the point in the profile view frame indicative of the predetermined location [emphasis added]”.

Amended independent claim 7 recites an apparatus for displaying a vertical situation of a vehicle having, inter alia, a processor configured to at least partially control the display to:

“generate one profile view frame;
begin a first vertical profile view of a first track of the vehicle at about a point in the profile view frame indicative of a current position of the vehicle;
end said first vertical profile view of the first track at about a point in the profile view frame indicative of a predetermined location; and
extend a second vertical profile view of a planned track of the vehicle from about the point in the profile view frame indicative of the predetermined location [emphasis added]”.

Independent claim 23 recites a program product having, inter alia,

“a vertical situation display program executable to generate a profile view frame containing a first track profile view from about a current vehicle position to about a predetermined location, together with a profile view of a second track of the vehicle extending from the predetermined location onward [emphasis added]”.

The first track and second track correspond to "a current track" and "a planned track", respectively, which terms are supported in Applicant's Specification at paragraphs 3 and 4 and FIGS. 1-4.

Briffe discloses an aircraft flight management system and method for aircraft information display and control. The system and method display a map on a display with aeronautical information indicators such that geographic locations of the aeronautical information indicators are correlated on the displayed map. In FIGS. 14-16 of Briffe, a vertical profile is displayed corresponding to an aircraft symbol with 5 seconds in a continuous line and an extrapolated path of up to 30 seconds as a discontinuous line, a current vertical flight plan, and a profile of terrain which is likely to be overflown "up to 2 minutes in the future and extrapolated from present flight parameters" (see Col. 18, lines 39-67).

However, Briffe does not disclose both a current track and a planned track, particularly where the current track is displayed from the current position of the aircraft up to a predetermined point and the planned track is displayed extending from the predetermined point. Applicant submits that the vertical flight plan disclosed by Briffe is not the same as the "planned track" recited in the claimed invention. One difference is that the terms "current track" and "planned track" recited in the claimed invention take into consideration a respective "swath" (see Applicant's Specification, ¶¶ 3 and 4). In contrast with the claimed invention, Briffe discloses a vertical flight plan based on altitude (see Col. 17, lines 49-52) that is point-to-point, navigation aid oriented but does not take into account any "swath". For example, "[o]bstacles need not impinge upon the current track profile 212 to be shown on the VSD 351" (see Applicant's Specification, ¶ 3).

It is unclear what FIG. 16 of Briffe shows. Briffe states that "FIG. 16 is a drawing of the MFD displaying enroute high-altitude chart with a waypoint list" (see Col. 4, lines 33-34). Applicant submits that FIG. 16 shows a vertical flight plan in solid line possibly corresponding to the enroute high altitude chart and waypoints. The discontinuous line shown in FIG. 16 arguably represents a 30 second extrapolated flight path as previously mentioned. However, it is unclear from FIG. 16 where the current aircraft position is, where a 5 second solid line ends, where the 30 second extrapolated discontinuous line begins as taught by Briffe, and where the vertical flight plan begins.

Additionally, it appears that the entire vertical flight plan is shown from beginning to end in FIG. 16 of Briffe. In contrast with Briffe, Applicant's claimed invention includes a unique relationship between the representation of the "current track" and the "planned track" as previously indicated with respect to claims 1, 7, and 23. Further, the 30 second extrapolated discontinuous line disclosed by Briffe is not the same as a "current track" as recited in the claimed invention. In fact, any discussion regarding FIG. 16 in Briffe is directed to a check list management system and not to a "current track" or "planned track" (see Col. 21, line 58 through Col. 23, line 27). Briffe does not disclose any relationship between a "current track" and a "planned track" on a vertical situation display.

Because of the foregoing differences, Applicant submits that claims 1, 7, and 23 are patentably distinguished from Briffe. Because claims 1, 7, and 23 are patentably distinguished from Briffe and because claims 2, 3, 6, 8-10, 14-16, 21, 21, 24, 27, and 28 depend from one of claims 1, 7, and 23 or an intermediate claim depending from one of claims 1, 7, and 23, Applicant submits that claims 2, 3, 6, 8-10, 14-16, 21, 22, 24, 27, and 28 are at least equally patentably distinguished.

OBJECTED CLAIMS

At page 3 of this Office Action, claims 4, 5, 25, and 26 are objected to as "being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." Additionally, claims 11-13 and 17-20 "would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims.

In view of the foregoing discussion regarding the patentable differences between independent claims 1 and 23 and Briffe and because claims 4, 5, 25, and 26 depend from one of independent claims 1 and 23 or an intermediate claim depending therefrom, Applicant submits that claims 4, 5, 25, and 26 are likewise patentably distinguished from Briffe.

In view of the amendments addressing the rejections under 35 U.S.C. 112, 2nd paragraph, and the foregoing discussion regarding the patentable differences between amended independent claim 7 and Briffe and because claims 11-13 and 17-20 depend from amended independent claim 7 or an intermediate claim depending therefrom, Applicant submits that claims 11-13 and 17-20 are likewise patentably distinguished from Briffe.

CONCLUSION

In view of Applicant's remarks, it is respectfully submitted that Examiner's rejections under 35 USC §102 have been overcome. Accordingly, Applicant respectfully submits that the application is in condition for allowance, and such allowance is therefore earnestly requested.

Appl. No. 10/616,836

Amdt. Dated November 2, 2004

Reply to Office Action of September 27, 2004

Should the Examiner have any questions or wish to further discuss this application, Applicant requests that the Examiner contact the Applicant's attorneys at 480-385-5060.

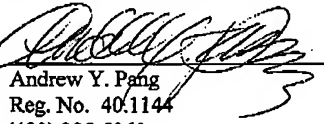
If for some reason Applicant has not requested a sufficient extension and/or has not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ, P.C.

Dated: November 2, 2004

By


Andrew Y. Pang
Reg. No. 40,1144
(480) 385-5060

Attachment